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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,096	03/12/2004	Richard M. Hogan	4022-000014	8094
27572	7590	04/03/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			DESAI, ANISH P	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/800,096	HOGAN ET AL.	
	Examiner	Art Unit	
	Anish Desai	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 31-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The applicant's arguments in response to the Office action dated 12/02/05 have been fully considered.

1. The requirement for election restriction is maintained.
2. The 35 USC Section 112 rejections are withdrawn.
3. The 35 USC Section 102 rejections over Katsuki et al. (US 4,427,743) are withdrawn and changed to 35 USC Section 102/103 rejections. The art rejection over Katsuki et al. (US 4,427,743) and Friedman et al. (US 6,159,608) are maintained.

Election/Restrictions

4. Applicant's election with traverse of Group II claims 13-30 in the reply filed on 01/12/06 is acknowledged. The traversal is on the ground(s) that there is no serious burden on the examiner to examine claims of Group I, II, and III together. This is not found persuasive because the examiner is clearly pointed out the burden in examining claims of Group I, II, and III together (see pages 2 and 3 of 12/02/05 Office action). The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13,14,16-18,20-23, 25-27, and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Katsuki et al. (US 4,427,743).

Katsuki et al. teach a laminated panel for use as safety glasses for vehicle (Column 4, lines 61-62) having good transparency (Column 2, lines 38-39). The laminated panel is comprised of a plastic sheet and a glass sheet (abstract). Figure 2 of Katsuki et al. shows, a laminated panel comprising a cushioning layer 4 sandwiched between the two plastic sheets 3A' and 3B' (Column 5, lines 26-30). According to Katsuki et al., fabrics made from polypropylene fibers can be embedded in the plastic sheets (Column 9, lines 9-11 and Column 9, lines 25 and 27). The plastic sheet of Katsuki et al. reads on the claimed expendable polymeric layer A. Moreover, the cushioning layer 4 of Katsuki et al. is made of resins such as copolymer of ethylene and

Art Unit: 1771

vinyl acetate and polyurethane (Column 5, line 54-55) and has sufficient tackiness or adhesiveness (Column 7, lines 44-47). Thus, the polyurethane based cushioning layer of Katsuki et al. reads on the claimed thermoplastic adhesive layer B made of polyurethane as claimed in claims 13, 17, and 26. Regarding claims 18 and 27, at column 6, line 42, Katsuki et al. teach two cushioning layers (Column 6, line 42). With respect to claims 20 and 29, at column 12, line 65, Katsuki et al. teach a polyurethane layer with thickness of 2 mm, which equates to 0.079 in (using 1 mm = 0.039 in).

With respect to the recitations "co-extruded A-B composite sheet" or "co-extruded A-B-A composite sheet", the said recitations are directed to a product by process limitations. The products by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). In the instantly claimed subject matter, the composite sheet of the applicant comprises an expendable

Art Unit: 1771

polymeric layer A and a thermoplastic adhesive layer B (A-B) as claimed or an expendable polymeric layer A, a thermoplastic adhesive layer B, and an expendable polymeric layer A (A-B-A) as claimed. Katsuki also discloses a laminated panel comprising a plastic sheet 3A', cushioning layer 4, and plastic sheet 3B' (Column 5, lines 26-30). According to Katsuki et al., fabrics made from polypropylene fibers can be embedded in the plastic sheets (Column 9, lines 9-11 and Column 9, lines 25 and 27). Thus, the plastic sheet of Katsuki et al. reads on the claimed expendable polymeric layer A. Moreover, the cushioning layer 4 of Katsuki et al. has sufficient tackiness or adhesiveness (Column 7, lines 44-47) and is formed of resins such as polyurethane (Column 5, line 54-55), which is thermoplastic. Thus, the cushioning layer of Katsuki et al. reads on the claimed thermoplastic adhesive layer B. Thus, the laminated panel of Katsuki is similar to the applicant's co-extruded A-B or A-B-A composite wherein A is an expendable polymeric layer and B is a thermoplastic adhesive layer.

With respect to claims 21 and 30, Although Katsuki et al. do not explicitly teach the claimed property of the expendable polymeric layer having a tensile strength greater than the mechanical bond between the thermoplastic adhesive layer and the expendable polymeric layer, it is reasonable to presume that said property is necessarily present in the laminated panel of Katsuki et al. because like material has a like property. The applicant is using an expendable polymeric layer and a thermoplastic polyurethane adhesive layer to form a composite sheet and Katsuki et al. also disclose a laminated panel comprising a plastic sheet and a cushioning layer made of a polyurethane layer wherein the polyurethane layer has sufficient adhesiveness. Thus,

the laminated panel of Katsuki et al. is similar in structure to the composite sheet of the present invention. Thus, the presently claimed property of the expendable polymeric layer having a tensile strength greater than the mechanical bond between the thermoplastic adhesive layer and the expendable polymeric layer would have been present. Accordingly, Katsuki et al. anticipate or strongly suggest the claimed subject matter.

6. Claims 15, 19, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuki et al. (US 4,427,743) as applied to claims 13 and 22 above in view of Friedman et al. (US 6,159,608).

The invention of Katsuki et al. as applied to claims 13 and 22 is previously disclosed. According to Katsuki et al., there is no limitation on the material of the plastic sheet and transparent resins with moderate flexibility and strength that can be used as plastic sheets (Column 5, lines 3-7). Katsuki et al. are silent as to teaching of the polymeric layer made of polyethylene and the thickness of the polymeric layer from 0.003 in to 0.01 in. However, Friedman et al. teach high clarity optical and safety glass laminates (abstract) used in the automotive industry (Column 1, lines 10-13). Additionally, Friedman et al. teach polyethylene based films having high clarity, very high moisture resistance, high UV light stability, and good heat resistance (Column 3, lines 18-22) used as an interlayer film in forming laminated glass product. Regarding claims 19 and 28, the thickness of the polyethylene film is 0.125 mm to 1.0 mm. The thickness of the polyethylene film equates to 0.0049 in to 0.039 in respectively (using 1 mm = 0.039 in). Thus, it would have been obvious to one having ordinary skill in the art

Art Unit: 1771

at the time the invention was made to use a polyethylene film of Friedman et al. with a given thickness as a plastic sheet of Katsuki et al., motivated by the desire to provide a laminated panel with high clarity.

Response to Arguments

7. Applicant's arguments filed 01/12/06 have been fully considered and are persuasive.

8. The 35 USC § 112 rejections are withdrawn in view of the present amendments and response (see page 8 of 01/12/06 amendments).

9. The 35 USC Section 102 art rejections of Katsuki et al. (US 4,427,743) taken alone are withdrawn in favor of the 35 USC Section 102/103 rejections because Katsuki et al. do not teach a A-B composite sheet or A-B-A composite sheet produced by co-extrusion.

Art Unit: 1771

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467.

The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

APD

Haibo
**HAI VO
PRIMARY EXAMINER**